

Sail Canada
Coastal Navigation vs. Basic Coastal Navigation



Old Coastal Navigation Standard	New Basic Coastal Navigation Standard
Closed Book Exam	Open Book Exam
Ashore Knowledge The candidate must be able to:	Ashore Knowledge The candidate must be able to:
	1. Describe the navigator's role and responsibilities including appraisal, planning, execution and monitoring position.
1. Explain the chart symbols and conventions on Canadian Hydrographic charts, in accordance with the terminology of <i>Chart 1</i> .	2. Explain the chart symbols and conventions on Canadian Hydrographic charts, in accordance with the terminology of <i>Chart 1, Symbols, Abbreviations and Terms</i> .
2. Identify a source of official Canadian government navigation publications.	3. Identify a source of official Canadian government navigation publications.
3. List the publications required for prudent navigation in the local area, including the following minimum requirements: a) Large scale charts of the area and <i>Chart 1, Symbols, Terms and Abbreviations</i> ; b) <i>Sailing Directions</i> ; c) <i>Tide and Current Tables</i> ; d) <i>Collision Regulations</i> ; e) Local rules and regulations; f) <i>List of Lights, Buoys, and Fog Signals</i> ; g) <i>Radio Aids to Marine Navigation (if using electronic navigation)</i> ; h) <i>Safe Boating Guide</i> .	4. List the publications required for prudent navigation in the local area and demonstrate their purpose, including the following minimum requirements: a) Large scale charts of the area and <i>Chart 1, Symbols, Abbreviations and Terms</i> ; b) <i>Sailing Directions</i> ; c) <i>Tide and Current Tables</i> ; d) <i>Current Atlas</i> ; e) <i>Collision Regulations</i> ; f) Local rules and regulations; g) <i>List of Lights, Buoys, and Fog Signals</i> ; h) <i>Radio Aids to Marine Navigation</i> ; i) <i>Safe Boating Guide</i> ; j) <i>Canadian Aids to Navigation</i> .
5. Describe the purpose of <i>Notices to Mariners</i> .	5. Describe the source and purpose of <i>Notices to Mariners and Notices to Shipping</i> .
4. List the instruments required for prudent navigation in the local area , including the following minimum requirements: a) Steering compass and deviation table b) Hand-bearing compass c) Dividers d) Protractor, plotter or parallel rule e) Watch or clock f) Depth sounder or lead line g) Log/knot-meter h) Pencil/eraser/notebook	6. List and describe or demonstrate the use of tools required for prudent navigation including: a) Hand-bearing compass; b) Steering compass and deviation table; c) Depth sounder and lead line; d) Log/knot-meter; e) Dividers; f) Protractor, plotter or parallel rule; g) Watch or clock; h) Pencil/eraser/note book.
	7. List factors affecting depth above or below chart datum in tidal and non-tidal waters.
6. Use the <i>Tide and Current Tables</i> to find: a) Times and heights of tides at reference and secondary ports; b) Direction and rate of current at reference and secondary stations.	8. Use the <i>Tide and Current Table, Current Atlas or chart embedded tables</i> to find: a) Times and heights of tides at reference and secondary ports; b) Direction and rate of current at reference and secondary stations;

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	c) Rate and direction of current at a specific location using tidal diamonds, or a Current Atlas.
7. Convert courses, headings and bearings between true, magnetic, and compass.	9. Convert courses, headings and bearings between true, magnetic, and compass.
8. Check compass deviation by means of a transit bearing.	
9. Plot: a) A dead reckoning position on a chart, using speed, time, and course through water; b) The estimated position allowing for the effect of current and leeway.	10. Plot: a) A dead reckoning (DR) position from a known position given speed, time, and course; b) A position fix based on two or more bearings on different terrestrial objects taken at one time; c) A position fix based on one bearing and a transit range based on terrestrial objects; d) Danger and clearing bearings.
13. Plot a chart position from terrestrial objects, using: a) Two or more bearings on different objects taken at one time; b) A running fix on one or two objects; c) One bearing and a transit range; d) One distance (i.e., a sounding, or dipping a light) and one bearing.	
10. Determine a heading that counteracts: a) Known current; b) Leeway.	
11. Given the course through water and speed, and two observed positions, determine the current.	
12. Determine: a) Estimated time of arrival (ETA); b) Revised ETA.	11. Given one or more planned legs and estimated speed, determine to the nearest minute: a) Estimated time of arrival (ETA); b) Revised ETA.
15. Demonstrate knowledge of passage planning , as follows: a) Prepare a plan of a coastal passage of at least 20 miles in three stages: i) An overall plan on a small scale chart, ii) A detailed plan on a large scale chart, iii) A departure or arrival plan including tide and current information; b) Use transits, lead marks, stern marks, clearing marks, danger/clearing bearings in piloting and passage planning; c) Transfer positions between charts using the nearest compass rose and measuring distances; d) Demonstrate a working knowledge of the Canadian buoyage and aids to navigation systems;	13. Use charts and publications to prepare a basic pilotage plan for a daytime trip including: a) Harbour entry and exit; b) Waypoints, rhumb line course, heading (in compass), distance, and ETA; c) Use of aids to navigation enroute; d) Consideration of water depth, current, weather, and other local factors and hazards. <i>(For 15 c danger/clearing bearings in the old standard see PO. 10 d above in the new standard)</i>
16. With reference to the GPS system: a) Understand the basic operation of GPS to determine position;	12. Recognize day and night appearance and meaning of the Canadian Aids to Navigation System (lateral, cardinal, special buoys; and daybeacons).
	14. With reference to GPS: a) Explain the basic operation of GPS to determine position;

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<p>b) List factors that affect the accuracy of positions given by GPS; c) Identify common GPS applications for navigation and cautions concerning their usage.</p>	<p>b) List factors that affect the accuracy of positions given by GPS; c) Identify common GPS applications for navigation and cautions concerning their usage.</p>
	<p>15. Describe the types of information that may be included in a vessels log.</p>
<p>14. Use correct plotting and labeling procedures as outlined below.</p>	<p>16. Use Sail Canada Uniform Navigation Symbols and Terms for plotting and labelling.</p>